

ABSTRACT OF THE DISCLOSURE

In a fuel cell system utilizing fuel cells which generate electric power by a reaction between oxygen and hydrogen, the moisture content within a fuel cell is adjusted to be brought within an appropriate range by adjusting the operating current of the fuel cell. The total amount of electric power generated by the system is maintained at a required value by supplying/obtaining electric power to/from a secondary battery as required, or by utilizing a plurality of separately controlled fuel cells (or fuel cell stacks) and increasing or decreasing the electric power generated by another fuel cell or stack that is currently operating with an appropriate moisture content.

15

20